

Title (en)  
METHOD OF ACQUIRING ULTRASONIC TESTING SIGNALS, AND CORRESPONDING COMPUTER PROGRAM AND ULTRASONIC TESTING DEVICE

Title (de)  
VERFAHREN ZUR ERFASSUNG VON ULTRASCHALLPRÜFSIGNALEN SOWIE ENTSPRECHENDES COMPUTERPROGRAMM UND ULTRASCHALLPRÜFVORRICHTUNG

Title (fr)  
PROCEDE D'ACQUISITION DE SIGNAUX PAR SONDAGE ULTRASONORE, PROGRAMME D'ORDINATEUR ET DISPOSITIF DE SONDAGE A ULTRASONS CORRESPONDANTS

Publication  
**EP 3555659 A1 20191023 (FR)**

Application  
**EP 17821679 A 20171205**

Priority  

- FR 1662523 A 20161215
- FR 2017053390 W 20171205

Abstract (en)  
[origin: WO2018109313A1] A method (200) for acquiring ultrasonic testing signals comprises: controlling (208) L emitting transducers (1081, ..., 108N) and N receiving transducers (1081, ..., 108N) for simultaneously receiving, for each M successive emissions, N measuring signals; and obtaining (210) a matrix of temporal ultrasonic signals of a size NxM. An initial matrix ([MC']) of size LxM' for encoding the successive emissions is previously defined (202) for a number M' of successive initial emissions strictly greater than M. An acoustic field calculation is carried out (204) for each of the initial M' emissions. A reduced encoding matrix ([MC]) of size LxM is obtained (206) by deleting M'-M columns of the initial encoding matrix ([MC']) on the basis of a selection criterion applied to the M' acoustic field calculations. Finally, the control (208) of the L emitting transducers for the M successive emissions is encoded using the reduced encoding matrix ([MC]).

IPC 8 full level  
**G01S 15/89** (2006.01); **G01N 29/26** (2006.01); **G01N 29/36** (2006.01); **G01N 29/44** (2006.01); **G01S 7/52** (2006.01)

CPC (source: EP US)  
**G01N 29/069** (2013.01 - EP US); **G01N 29/262** (2013.01 - EP US); **G01N 29/4463** (2013.01 - EP US); **G01S 7/52047** (2013.01 - EP); **G01S 15/8915** (2013.01 - EP); **G01S 15/8959** (2013.01 - EP); **G01S 15/8977** (2013.01 - EP); **G01S 15/8997** (2013.01 - EP); **G01N 2291/0289** (2013.01 - US)

Citation (search report)  
See references of WO 2018109313A1

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Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**WO 2018109313 A1 20180621**; CA 3046105 A1 20180621; EP 3555659 A1 20191023; EP 3555659 B1 20210127; FR 3060768 A1 20180622; FR 3060768 B1 20190524; JP 2020502517 A 20200123; JP 6972134 B2 20211124; US 2020080969 A1 20200312

DOCDB simple family (application)  
**FR 2017053390 W 20171205**; CA 3046105 A 20171205; EP 17821679 A 20171205; FR 1662523 A 20161215; JP 2019532086 A 20171205; US 201716470027 A 20171205